



*California Children's 5 a Day—  
Power Play! Campaign*

**Strategic Exploratory Research with  
Tweens**

*6 focus groups with low-income 9- to 11-year-old boys  
and girls  
in Los Angeles, Fresno, and Sacramento*

**October 2002**

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## Background and Objectives

### **Background**

The *California Children's 5 a Day—Power Play! Campaign* utilizes a multi-channel, community-based approach to target 9- to 11-year-old children and their families with the 5 a Day and physical activity messages. The campaign encourages children to eat at least 5 servings of fruits and vegetables and be physically active for 60 minutes every day for better health.

### **Objectives**

The *California 5 a Day Campaign* team commissioned qualitative research to explore perceptions, opinions, beliefs and attitudes among 9- to 11-year-old, low-income children about fruit and vegetable consumption and, secondarily, physical activity.

Specific objectives of the study include:

- ♦ Identifying marketing strategies that will motivate 9- to 11-year-old children to increase their fruit and vegetable consumption
- ♦ Identifying current consumption habits, and the barriers that 9- to 11-year-old children face in increasing their fruit and vegetable consumption
- ♦ Determining how children's peers, parents and siblings influence their likelihood of eating 5 servings of fruits and vegetables
- ♦ When possible, identify differences in each of the above topical areas based upon gender and geographical location.
- ♦ Secondarily, to understand the connotations of various terms describing "physical activity," and, when time permits, to explore reasons why children believe they are not more physically active.

### **Methodology**

Six (6) ninety-minute focus groups were conducted in total. Two groups were conducted on September 30<sup>th</sup> in Long Beach, two groups were conducted on October 1<sup>st</sup> in Fresno, and two groups were conducted on October 3<sup>rd</sup> in Sacramento.

One group of girls and one group of boys were conducted in each market. Six to seven children participated in each group.

Respondent specifications included:

- All were age 9-11 years in the 4<sup>th</sup> or 5<sup>th</sup> grade; approximately equal mix of each grade in each group

- All were from low income households (no higher than 185% of the federal poverty level)
- Mix of low (<2 servings/day) and medium (3-4 servings/day) fruit and vegetable consumption; no one ate 5 or more servings a day
- Mixed ethnicity in each group – Caucasian, African-American, Latino, and Asian/Pacific Islander (Note: Recruiting Asian/Pacific Islanders proved to be extremely difficult in all three markets for a variety of reasons: income too high, eat too much f/v, not willing to participate in the screening process, language barriers, etc. In the end, only Long Beach was able to recruit one A/PI per group.)
- Children were not on any special diets or food restrictions (i.e., Kosher, Halal, etc.)
- Children did not have disabilities that prevented them from participating in physical activities
- Fluent in English
- Parents not employed by a company that produces fruits or vegetables, nor were they a doctor/nurse/registered dietician or other expert in child nutrition/health
- No market research participation in the past 6 months. None ever on health issues.

### **Focus Group Discussion Flow:**

The focus groups began with a brief discussion of participants' personal goals, then explored their current associations with, and consumption of, fruits and vegetables. Following this, they discussed barriers to consumption of fruits and vegetables and their expectations for what would happen if a kid started eating at least 5 servings of fruits and vegetables a day.

In the first two groups, children brainstormed ideas to make eating fruits and vegetables fun, easy, important, and cool. Due to time constraints, this exercise was eliminated from subsequent groups. All groups evaluated a list of promise statements, identifying statements that made them most interested in eating more fruits and vegetables and the statements that they did not believe.

Then they briefly discussed their preferences for terms describing physical activity and the recommended amount of time to spend each day on physical activity.

Time permitting, they wrote down a couple final suggestions for how to encourage children to eat more fruits and vegetables and to be more physically active.

### ***IMPORTANT NOTE:***

*This is a report of qualitative research. It is exploratory in nature; that is, it is used to elicit a range of responses, stimulate dialogue, generate ideas, and develop hypotheses. Findings are intended for directional guidance and understanding. While we hope that the respondents expressed views that are representative of the populations addressed in the research, the results of qualitative research are not meant to be quantified nor are they meant to take the place of a quantitative study.*

## Conclusions/Implications

Unfortunately for fruits and vegetables, they are up against the billions of dollars spent on glamorizing “junk food” to this age group. This alone is probably the biggest barrier to increased fruit and vegetable consumption, linked closely to peer pressure. Although their low level of fruit and vegetable consumption does not reflect this awareness, these participants are aware, at least on a rational level, of the importance of eating more fruits and vegetables. This research suggests that the biggest challenge for 5 a Day appears to be how to get children to internalize the benefits of fruit and vegetable consumption, even more so than “just” teaching them about the benefits.

By way of an overview, findings from these six focus groups reveal some gender-specific differences in attitudes about fruit and vegetable consumption, but few or no differences that correspond to geography. The differences by gender emerge primarily when participants discuss barriers and motivators for eating more fruits and vegetables. Any differences that emerged in this study are noted where appropriate throughout this report.

Aside from participants’ attendance at schools that served fruits and vegetables at lunch and provided them with nutritional education, as well as the influence of their peers, no other environmental or societal factors emerged consistently as influences upon children’s fruit and vegetable consumption. It is possible that these kinds of influences might come out more strongly in another kind of research (i.e., ethnographic or parent/child pair interviews).

It is important to remember that this study was only conducted among children, and thus findings are based solely on their perceptions and beliefs and on what they would reveal in a group setting. Future research may want to explore similar issues with parents and educators, and/or parent/child pairs to acquire other perspectives on this topic.

### Current Habits and Associations with Fruits and Vegetables

- Fruit generally seems to be a more appealing food to children ages 9 to 11 than vegetables. There are many things that these participants like about fruit, especially its sweetness and juicy consistency; things they dislike about fruit are less top-of-mind. Conversely, their dislikes about vegetables are more top-of-mind than the things they like about vegetables.
  - ⇒ Since they seem to almost naturally or inherently like fruit, children may be more receptive to messages that place primary emphasis on fruit, with secondary emphasis on vegetables. For evolving communication campaigns or school programs, 5 a Day may want to start by focusing more on fruit, then, once children are eating more fruit, start emphasizing vegetables.
- Children perceive that they have learned most of what they know about the importance of fruits and vegetables at school; while they think that parents play a smaller role in this effort.

- ⇒ The 5 a Day campaign should continue to direct some of its efforts at schools because the message is getting through to children there. Classroom and cafeteria activities introducing children to a wide variety of fruits and vegetables, various ways to eat them, and their benefits, are important.
- ⇒ If not already doing so, the 5 a Day team might want to consider talking with groups of school food service personnel (decision makers and cafeteria staff) to discuss their role in helping children see the benefits of fruit and vegetable consumption.
- ⇒ More effort is needed with parents. Parents' attitudes and practices regarding fruits and vegetables must reinforce what children are learning in school. Focus groups with parents should be considered to understand the kinds of materials that would be helpful to parents to get them in step with the 5 a Day program and encourage their children to eat more fruits and vegetables.

## **Barriers**

- As suspected, there are a variety of barriers inhibiting children from eating more fruits and vegetables. Peer pressure is an overriding theme, as is perceived bad taste (especially for vegetables.) Additionally, many of these children think they are already eating enough, despite the fact that they know they should be eating “five a day.” Girls also don't feel like they have the kinds of fruits and vegetables that they like to eat at home, while boys are unsure how to prepare them.
  - ⇒ To even begin to combat the efforts by fast food and unhealthy food companies to convince children that they need these less nutritious alternatives to fruits and vegetables, 5 a Day should continue to run television commercials and/or radio spots in key day parts. In many ways, these commercials should glamorize fruits and vegetables in a similar fashion to those spots selling unhealthy food. They need to show children that “all the cool kids” are eating fruits and vegetables. (Of course they need to do this in a believable fashion, and other promotional and educational efforts must be working in synergy.)
- Since their peers have a great influence in children's lives, generating positive word-of-mouth may be the most powerful method of encouraging children to eat more fruits and vegetables and to improve the image of fruits and vegetables. Peers have the potential to be a positive influence but currently are more likely to be a barrier to participants' fruit and vegetable consumption. According to these participants, siblings have little impact on their fruit and vegetable consumption.
  - ⇒ Consider marketing efforts that actively encourage positive word-of-mouth marketing among children. Many of the other barriers will probably diminish if children's overall image of fruits and vegetables is enhanced.

- ⇒ Since peers are an important influence on children’s eating habits, consider using well-known spokespersons that are close to the same age as these children.
- ⇒ If peer-counseling groups exist at schools, these might be used in some way to help get the 5 a Day message out to children, too.
- ⇒ Community youth organizations should continue to be targeted by the campaign as another avenue to develop positive peer influence.
- Another barrier to eating fruits and vegetables is the perception that these are not as sweet or as good-tasting as their favorite unhealthy foods.
  - ⇒ Eating suggestions obviously should be aimed at making fruits and vegetables as appetizing and as tasty as possible to these children, while still retaining the nutritional value. The recipe book idea should be effective in this area, as are school programs that show children how to prepare fruits and vegetables so they will taste good.
  - ⇒ Communications may want to feature the fruits and vegetables that children like the best, and not attempt to fight the battle with things like lima beans, asparagus or cauliflower.
- Breakfast and after-school snacks represent opportunities to increase fruit and vegetable consumption among children. Schools presently seem to be doing an effective job in getting children to eat fruit at lunch but may need more help in getting them to eat their vegetables.
  - ⇒ 5 a Day should encourage parents to ask their children what kinds of fruits and vegetables they would like before they go shopping and encourage children to ask their parents to purchase their favorite fruits and vegetables. One barrier to consumption according to these participants is that they don’t have the kinds of fruits and vegetables they like at home. If parents encouraged children to ask for their favorites, and children encouraged parents to buy them, this could help overcome that barrier.
  - ⇒ To get children to eat fruit at breakfast, the 5 a Day campaign needs to educate parents and children about ways to make eating fruit for breakfast very fast and easy. A current barrier is that fruit is perceived to be too time-consuming for breakfast. Parents and children need fast, simple tips and serving ideas for breakfast. They also need suggestions for combinations involving fruit and other breakfast foods like cereal, since another barrier is that fruit does not combine well with their usual breakfast foods.
  - ⇒ Similarly, 5 a Day needs to educate both parents and children about fast, easy ways to use fruits and vegetables in after-school snacks. This can help overcome the perceived barrier that fruits and vegetables are difficult to prepare.

- The “5 a day” message is starting to get through to children, although it appears that there is still some confusion about how much “five a day” really is. Additionally, girls in this study remembered the “5 a Day” commercials more than boys.
  - Even if they know that it is five “servings” a day, they are still not sure how much that is. Some associate a “serving” with a very large and unrealistic quantity of food. If eating five servings a day seems unrealistic, children will be discouraged from even attempting to achieve this goal.
- ⇒ 5 a Day should look for opportunities to convey how much “five a day” really is. The size of a serving should be explained in simple language or shown visually so children and parents understand that this is an achievable amount.
- ⇒ If at all possible, the 5 a Day Campaign should encourage networks to run the *Shaq’s Secret* public service announcement on programs that boys watch. This execution sounds like it should be very relevant to these boys since so many of them aspire to be professional ball players, however, based on this study, boys do not appear to be seeing this execution.
- ⇒ To get children’s attention, future 5 a Day promotional materials should continue to include spokespersons/celebrities who are working in the areas that relate to children’s personal goals for the future (e.g., professional male and female sports figures, doctors, veterinarians, singers, etc.)

### **Expectations and Motivators/Facilitators**

- Children are aware of, or can easily imagine, many tangible and intangible benefits from eating at least five servings of fruits and vegetables a day. However, awareness of these benefits does not appear to have convinced these children to eat the recommended amount.
  - Benefits to emphasize in future communications to children promise enhanced physical capabilities and success. “Having more energy,” and “becoming stronger,” (which are closely associated by some children), “doing better in sports,” and “growing” appear to be motivating reasons to eat more fruits and vegetables for both boys and girls. Girls may lean more toward energy, while boys may prefer doing better in sports and getting stronger.
  - Doing better in school is expressed as a personal goal by some of these participants, however, many find it hard to believe that fruits and vegetables can facilitate achieving this goal. They believe eating more fruits and vegetables can help the body but have not learned how this can help the brain, too.

- ⇒ The 5 a Day Campaign needs to help children internalize the rational benefits of eating fruits and vegetables. So, for example, marketing efforts should show that eating fruits and vegetables will give children more energy, and then take that message to the next level so children see that with that extra energy they will be able to accomplish more things, feel better about themselves, and be more respected by their friends. In classes, teachers may want to discuss not only that eating fruits and vegetables will help make children strong, but also what the real benefits of that are to them.
- ⇒ Benefits related to performance in sports and in school should be emphasized over health-related benefits. Sports and school are more tangible and more real to children on an on-going basis than thinking about health-related benefits now or in the future.

### **Physical Activity**

- To these participants, “play” is more appealing than “exercise,” simply because “play” is doing something fun and “exercise” can be work, however, play doesn’t necessarily imply an “active” activity. While children had various interpretations of “be active” this term generally suggests an activity that will elevate the heart rate. “Be physically active” was unclear to children. As one participant explained, these alternative terms are not as “kid-friendly” or familiar as the word “play.”
- These participants express very little awareness of how much exercise children their age should get in a day.
  - ⇒ As eating “five a day” has received publicity in the schools and media, the benefits of exercise should, too. Parents, educators and children need to hear this aspect of the message.
  - ⇒ This research does not reveal a clear preference for the most appropriate “activity” terminology to use with children. Consider using the terms “active play” or “be active” in communication efforts. “Play” sounds like the most fun, but, on its own, does not imply the kind of vigorous activity needed to encourage children to be more fit. “Active” needs to be emphasized to indicate that this is more than sitting inside playing video games. While some children associate “be active” with hyperactivity, others just thought it meant physical activity. Of course, the visuals that accompany whatever word is used will help reinforce the level of activity they should be achieving.
- While there isn’t a huge difference, since it includes the word “minutes,” the phrase “60 minutes” seems to suggest a shorter amount of time than “one hour” according to these participants.
  - ⇒ Consider using “60 minutes” in messages about physical activity to make this goal seem achievable to children.

## Detailed Findings

### **Background: Personal Goals**

*Note: As participants introduced themselves to the groups, they described verbally and via pictures what their personal goals were. There was no in-depth discussion about this topic.*

Across all groups, a common theme in girls' personal goals was a desire to help others; a common theme in boys' personal goals was a desire to become famous by playing professional sports. These themes were very consistent for girls and boys in each of the three locations.

Many of the girls in this study expressed the desire to become a doctor, veterinarian, or teacher. Other goals that some girls mentioned were being a wife/mother, lawyer, soccer player, actress, movie star, singer, writer, and artist.

Many of the boys in this study wished to become a professional basketball, football, or baseball player; a few others wanted to play soccer or be a skateboarder. Other goals mentioned by some boys were police officer, stuntman, sled dog racer, guitar player, singer, photographer, doctor, and President of the United States.

## **Associations and Current Habits with Fruits and Vegetables**

### Associations and Current Habits with “Fruit”

Participants easily identified many things they liked about fruit. They usually spontaneously talked about what they liked about fruits, without much prompting from the moderator. What they disliked about fruit seemed less top-of-mind.

Their likes and dislikes about fruit were very consistent for girls and boys and also were consistent across each location. *(As an aside to the reader, there appeared to be very few geographic differences for all of the topics that participants discussed during these focus groups; some gender differences emerged for certain topics and are noted where appropriate in this report.)*

Things they liked about fruit or the “good things” about fruit included:

- Sweet; has sugar in it
- Juicy
- Tasty; gets your taste buds going
- Good for your body, helps your teeth and bones
- Makes you healthy
- Has vitamins, calcium, iron
- Looks good; comes in different shapes and colors (red, yellow, orange, green, purple)
- Everybody likes fruit
- Some fruits (like frozen grapes) are good on a hot day

Things they disliked or the “bad things” about fruit included:

- Can look ugly and nasty when old, rotten, or bruised
- Get slimy and mushy when old
- Can't save it for later once you start eating it
- Some fruit has seeds; seeds feel funny if you swallow them; seeds hurt if you bite too hard on them; seeds might grow in your stomach
- Can get canker sores from too much acid; oranges sting your lips if you have a cut
- Some fruits don't taste very good: some aren't sweet and taste sour and pucker you up
- Might be allergic to them
- Can make you sick if you have a sugar problem and/or eat too much fruit

Lunchtime at school appeared to be a typical occasion for participants to eat fruit. When participants were asked to describe one of the last times they ate fruit, most indicated that they had fruit earlier that same day for lunch at school. Some stated that they ate fruit every day at lunch at school. They ate fruit at school because it was provided, because other children were eating it, and because it was sweet, helped get their energy back and it filled them up if the main course at lunch was not filling enough. At school, they enjoyed eating fruits like oranges, bananas, grapes, peaches, pears, watermelon, and grapes. Some liked combinations of fruit at school or liked especially juicy fruits:

*“Peaches and grapes make a great combination. I couldn’t wait to eat my fruit today.”*

*“We had peaches and pears today. They were good because they were juicy and ripe.”*

Other occasions for eating fruit were mentioned less consistently. These occasions and the reasons why fruit was appropriate include:

- At recess at school: to get their energy back and to keep them feeling full until lunchtime
- An after-school snack at home or at an after-school program: when they were tired or bored; when someone required that they eat it, when they needed to be energized until dinner; or because it was healthier than eating candy or chips
- After dinner/before bed: as dessert in a pie, or a whole piece of fruit
- At a fruit stand: Fruit was easy to eat while walking around

Perhaps surprisingly, only a couple participants mentioned eating fruit at breakfast. Some liked eating apples for breakfast.

*“An apple wakes me up instead of having cereal. I just go downstairs and grab it.”*

*“An apple keeps me feeling full until lunchtime.”*

Participants had some difficulty identifying occasions that were not good for eating fruit. Their reasons for not eating fruit at these occasions often were related to the perception that they would get a stomachache from eating fruit. Examples of when and why they did not like to eat fruit were:

- At breakfast: fruit might upset their stomach in the morning; and fruit did not “go” with cereal (perhaps this is because they are eating sugar-coated cereals?):

*“It tastes weird if you have an apple or banana with cereal.”*

- At dinner: fruit did not taste good with meat (e.g., burrito with fruit was not a good combination); or fruit made their stomach hurt if they were already full after eating the main course
- When they were playing hard: their stomach would hurt if they ate fruit

There were differences among participants regarding whether they ever asked their parents for fruit. Some asked their parents for fruit, especially after school, because they were hungry and fruit would not fill them up too much before dinner. Others did not ask their parents for fruit because they either didn't particularly want fruit, or they just took fruit whenever they wanted it. A few reported that they asked their parents for their favorite fruit when parents were going shopping, and some go shopping with their parents; others were more likely to ask their parents to get them donuts, cookies, or candy rather than fruit, because these foods tasted better than fruit.

Participants liked to eat fruit in a variety of forms, including cut into pieces (which made it easier to eat), whole (like an apple, grapes, etc.), mixed (a fruit cup), pureed in a cup (like applesauce), and as juice.

### Associations and Current Habits with “Vegetables”

Unlike their positive top-of-mind associations with fruit, many participants' first top-of-mind associations with vegetables were negative. They easily and spontaneously talked about what they disliked about vegetables or identified specific vegetables they disliked; talking about what they liked about vegetables took some probing.

Things they liked or the “good things” about vegetables included:

- Healthy and good for you; help you grow; give you energy; make you see better
- Some vegetables taste good
- Some are juicy; juice has nutrition in it
- Some are really plump
- Corn on the cob is fun to eat
- Variety of vegetables available
- Can put vegetables in sandwiches

Things they disliked or the “bad things” about vegetables included:

- Some vegetables taste bad or taste funny
- Some vegetables look good but taste bad or taste sour
- They do not have as much flavor as fruit; they taste plain and are not sweet
- Some have an unpleasant texture or feel inside the mouth (e.g., asparagus feels slimy in the mouth; the inside of lima beans have a funny texture, and cooked carrots are too soft)
- Some smell funny
- Eating too many vegetables can cause gas

- Onions make the eyes water
- Vegetables are hard to prepare because they have to be cooked

Unlike their daily fruit consumption, some of these participants reported that they had not eaten any vegetables that day but had last eaten vegetables the day before. A few had vegetables at lunch that day when they had a salad/lettuce.

While it is not clear how often this happens, some children reportedly ask parents for vegetables at times, or ask for vegetables at school. For example, at home they asked for carrots after school because it was a healthy snack, or asked for lettuce and tomatoes on their sandwich because this added taste. At school, they asked for vegetables at lunch when they did not like the main course. Others never asked anyone for vegetables:

*"We have vegetables with every meal at school so I don't ever ask for them"*

*"Vegetables don't taste good"*

They gave a variety of examples of the best way to eat vegetables:

- Mixed together in a soup or stew
- In a salad with dressing
- Raw, with or without salad dressing on them
- On top of a sandwich
- As "ears" (corn) with holders
- Fried
- Grilled (one girl noticed an ad for Del Taco or Taco Bell featuring a burrito with grilled vegetables and thought the grilled vegetables looked good)
- Decorated (e.g., garnished with spices on or around them)
- Cooked in butter
- Topped with cheese sauce
- In a smoothie

## Importance of Fruits and Vegetables

While they might not be eating as many as they should, nearly all participants in all locations agreed that it was important for children their age to eat fruits and vegetables. A few Fresno boys had the opposite point of view, based on the perception that eating more fruits and vegetables caused gas. (Peer influence was very obvious in this group of Fresno boys.)

Participants easily offered several health-related and performance-related reasons to explain why eating fruits and vegetables is important. Typical reasons were:

- Makes you stronger: makes your muscles stronger; builds strong bones

- Makes you healthier: puts different kinds of vitamins in your body; get the nutrients you need for your systems; you won't get sick; you won't get scurvy; you won't need glasses
- Makes you do better in school: makes you smarter; makes your brain work better
- Makes you do better in P.E.; makes you faster

When asked how they learned that eating fruits and vegetables was important, participants usually indicated that they had learned this at school. Specific sources of this information at school included their teacher, the Food Pyramid, the 5 a Day program and booklet, the Vegetable or Fruit of the month program, a nutrition program, and cafeteria workers.

With regard to the Vegetable or Fruit of the Month program (conducted in Los Angeles Unified School District), while many children didn't mention this program by name, it seemed to be effective in introducing participants to new fruits or vegetables. For example, as participants discussed what they liked and disliked about fruit, many mentioned "kiwi" specifically, probably because they were exposed to kiwi during a program at school.

Some girls indicated that they learned about the importance of eating fruits and vegetables from commercials.

Parents/relatives were mentioned infrequently as a source of information about the importance of eating fruits and vegetables. A few participants indicated that their parents or grandparents said that this was important; one Fresno girl was told by her parents to eat "five a day" specifically.

"Healthy" programs on television (i.e., cooking programs?), and nutrition information in restaurants and stores were additional sources of information for a few participants. One or two recalled seeing the Food Pyramid at McDonalds.

When probed, participants confirmed that their parents believed eating fruits and vegetables was important. Some parents told them specifically that it was important because it would make them stronger and help them grow and be healthy; other parents used their own behavior to communicate the importance of eating fruits and vegetables:

*"It must be important. My parents eat them and they feed them to me, too."*

*"They make me eat them. They get mad if I don't eat them. I can't go outside after dinner unless I eat them."*

Participants perceived that their friends had mixed feelings about eating fruits and vegetables. Some friends liked them; others did not, or only liked certain fruits and vegetables; some friends knew that eating fruits and vegetables was important but did not eat them because they did not like them. Other participants did not know how their friends felt about eating fruits and vegetables because they never talked about fruits and vegetables with them.

It appeared that participants usually did not talk with parents about fruits and vegetables, and rarely talked with siblings about this, either. When parents did talk to them about fruits and vegetables, it seemed to be mostly in a disciplinary fashion (i.e., insisting that their children had to eat their fruits or vegetables, getting angry and withholding privileges if they did not). A few participants indicated that their parents sometimes asked them what kinds of fruits or vegetables they wanted from the store or for dinner.

## **Barriers**

### Perceptions of Fruit and Vegetable Consumption

While these children were recruited based on their low consumption levels of fruits and vegetables, nearly all these girls and boys perceived that they currently ate “enough” fruits and vegetables. A few others were not sure and guessed that they “maybe” ate enough. Only one or two believed (or, admitted) that they did not eat enough fruits and vegetables.

When asked how many fruits and vegetables they ate in a typical day, they usually indicated that they ate about one to three fruits and vegetables. One girl acknowledged that sometimes she did not eat any fruits and vegetables:

*“If it’s a bad day, I eat cookies.”*

Participants had different perspectives regarding how many fruits and vegetables they “should” be eating in a day. Their estimates ranged from two a day (e.g., a vegetable at lunch and a salad at dinner) to three or four a day, to five fruits and vegetables a day.

There also were differences in their perceptions of what a doctor would tell children their age about how many fruits and vegetables they “should” be eating in a day. With the exception of the group of Fresno boys, there usually were some participants in each group who stated that a doctor would tell them to eat five a day. One Long Beach boy even sang a “5 a Day” jingle when he answered this question. Other participants expressed a wide range of estimates. At the low end of the estimates, they thought a doctor would tell them to eat one a day or one about every other day; at the high end, they guessed a doctor would tell them to eat 10 or 20 a day. Several others guessed two or three a day (one at each meal or at two of the three meals per day).

When asked how they knew about eating “five a day,” girls in each of the three locations spontaneously mentioned that they saw this in a commercial. In Long Beach, one girl described the commercial and recalled the line “You should have your wish;” in Fresno, girls described how a short kid turned into a really tall basketball player because he ate five a day. According to girls who recalled seeing this commercial, it made them hungry for fruits and vegetables. Some of the boys learned about “five a day” when they received a card explaining how much they should eat during a vegetable or fruit of the month program at school. None of the boys mentioned seeing a “5 a Day” commercial on an unaided basis.

Most of these participants interpreted “five a day” to mean five in total (i.e., two fruits and three vegetables a day, or vice versa). A few Sacramento boys felt that “five a day” meant five fruits and five vegetables a day (or 10 servings in total per day). However, there was a lot of confusion over five “what” a day. Five servings? Five pieces? Etc. When they did know that it was a “serving,” it is noteworthy that most participants did not have a clear understanding of the definition or size of a serving of fruit or vegetables. They tended to think of a “serving” as being an entire whole fruit or a plateful. Based on this perception, participants felt that “five servings a day” sounded like a lot to eat.

*“You’d need to eat five peaches a day.”*

*“Five platefuls of vegetables...That’s a huge amount.”*

*“I don’t know what ‘five servings’ really is.”*

Many of these girls and boys were aware of the Food Pyramid, usually because they were exposed to this at school. Their teachers taught them about the Food Pyramid; some boys recalled seeing this in their science book. Many could explain what the Food Pyramid was, noting that the “top part” was the bad foods or the worst stuff that they should eat only in limited quantities, like candy and chips.

### Reasons for Not Eating Fruits and Vegetables

*Participants in the Fresno and Sacramento groups discussed why they did not eat fruits and vegetables at specific meal occasions. Then participants were given a list of 11 possible reasons (developed from the Long Beach groups) for not eating more fruits and vegetables. They used stickers to identify the two biggest reasons why they personally did not eat more fruits and vegetables. A copy of the list of 11 reasons is in the Appendix.*

According to participants, barriers to eating more fruits and vegetables were both tangible and intangible. Some of these barriers related to the fruits’ and vegetables’ physical characteristics (how they looked, tasted, smelled, etc.); other barriers related to their own or friends’ and parents’ feelings and attitudes about fruits and vegetables.

Tangible barriers related to the fruits and vegetables themselves were:

- They do not taste as good as sweets or “junk food.” (This appears to be one of the top reasons for many participants.)
- They do not contain sugar.
- They are gross.
- They smell bad or nasty.
- Some have weird names, like cauliflower. A weird name implies a weird or bad taste that kids would not like.

Intangible personal or people-related barriers were:

- They are lazy and think it is easier to heat up ravioli or Chef Boyardee or get “junk food.” (This was another top reason for some participants.)

*“Junk food is always right around the corner.”*

- They are too full to eat fruits and vegetables. When eating dinner, they save eating these until last if it is a type of fruit or vegetable they do not like.
- They feel that they will look silly eating them.
- They will not fit in with their friends if they eat more fruits and vegetables because their friends do not like fruits and vegetables.
- They do not care about fruits and vegetables and do not eat balanced meals.
- They do not know when to eat them or how many fruits and vegetables they should eat.
- Their parents do not like fruits and vegetables. Parents do not eat fruits or vegetables themselves, and do not serve them to their children.

Other barriers to eating more fruit specifically:

- They do not like fruits with little seeds inside.
- Fruits are too sour and do not contain enough sugar.

Other barriers to eating more vegetables specifically:

- They are not sweet enough.
- They do not taste good.
- They are too dry.
- Vegetables get old.

With few exceptions, it appeared that boys and girls generally did not eat fruit in the morning for breakfast. They were more likely to skip breakfast, or to eat cereals, eggs, and/or breakfast-related meats for breakfast, because these seemed faster and/or were perceived to be more filling than fruit. In children’s own words, representative reasons why they did not eat fruit in the morning for breakfast are shown below.

*“Fruit’s not heavy enough. Eggs are heavy. You won’t get as hungry in the morning before lunchtime.”*

*“I don’t have time to eat fruit. Sometimes eating fruit takes longer.”*

*“Cereal is faster to eat and cereal tastes good.”*

*“It sounds weird to eat fruit in the morning. You should eat fruit at lunch. Fruit doesn’t sound like a morning food.”*

*“Fruit might not go with eating eggs for breakfast, then your stomach would be upset.”*

*“It’s too cold in the morning to eat fruit. Your teeth get cold when you bite into fruit.”*

*“My grandmother makes us hot food, brain food like sausage, bacon and eggs.”*

Peers/friends were influential with respect to whether children eat fruits or vegetables served with their school lunch and to their impression of fruits and vegetables overall. Some participants indicated that their friends did not like certain fruits and vegetables and this apparently affected their own preferences. According to Fresno girls, boys generally did not eat fruit for lunch at school because girls did eat fruit:

*“Boys say fruit is for girls. Boys think they’re tougher than girls.”*

The other reason for not eating fruits or vegetables served with their school lunch was that dark-colored fruits could stain their clothes.

Being in the mood for something sugary-sweet or something salty often motivated participants to choose something other than fruits or vegetables for their after-school snack. A related reason for choosing something else was that they wanted a change of pace, since they just had fruits and/or vegetables for lunch at school. Instead of choosing fruits or vegetables, popular choices for their after-school snack were cookies, candy, and chips, for these reasons:

*“I have a sweet tooth.”*

*“Oreos are good because they have sugar in them.”*

*“Vegetables don’t taste as good as candy or cookies.”*

*“I’m in the mood for chips (after school) if I didn’t have the chips I like at lunch.”*

Some children do not eat fruit as an after-school snack because they do not have fruit at home.

While it is unclear how often this happens, some of the Sacramento boys reported that they ate healthier snacks after school, like yogurt, apples, bananas, and crackers. They occasionally could eat candy after school as a reward from their parents. They preferred candy as a reward because it “tasted better” than fruits or vegetables.

When asked, there was no consensus regarding whether it was easier to eat fruit or “junk food” after school. Some participants perceived that fruit was faster and easier to eat because they merely had to wash it, and then eat it. Others perceived that junk food was easier because it did not have to be washed off, as fruit did. Others felt that both fruit and junk food were equally easy to eat:

*“Same - you either have to wash an apple, or you have to take off a candy bar’s wrapper and throw it away.”*

It appeared that these participants rarely bought fruits and vegetables themselves. Their parents usually bought fruits and vegetables for the household. However, some indicated that they occasionally asked their parents to buy them a certain type of fruit or vegetable that they liked.

When asked what they would buy for an after-school snack if they had their own money, boys were likely to admit they would buy “junk food” rather than fruits and vegetables. They would buy “junk food” because it “tasted better” than fruits and vegetables, there was “more variety” available to them, and it was faster and easier to eat. They became very animated and excited when they talked about “junk food” and candy, where as when they spoke about fruits and vegetables, they tended to be more sedate. To some participants, a possible advantage for buying “junk food” instead of fruit was that it was less expensive.

A few boys claimed they would buy fruits and vegetables with their own money. It was difficult to tell if this was what they would really do, or if they were saying this because this was what they felt they “should” be doing since the group discussion focused on eating fruits and vegetables.

Using the list of 11 possible barriers, some differences appeared to emerge for girls versus boys regarding the biggest reasons why they personally did not eat more fruits and vegetables. While these rankings are in no way quantitative or projectable, among these respondents, the biggest reason for girls was *We don’t usually have the kinds of fruits and vegetables I like at home (E)*. Boys don’t eat more fruits and vegetables because: *My friends would think I’m weird (G)* and *I’m not sure how to prepare them (C)*.

While some girls also chose *I’m not supposed to use a sharp knife* as one of their top reasons, it appears that wasn’t really a main reason that some of them didn’t eat more fruits and vegetables. When probed, some girls acknowledged that, while they are not allowed to use a sharp knife (which is why they chose the statement), using a sharp knife was not a prerequisite for eating fruits and vegetables because they could peel a fruit or eat certain fruits or vegetables whole without cutting them first.

*We don't usually have the kinds of fruits and vegetables I like at home* was a barrier to some participants, notably girls. They complained that their parents did not ask them what they wanted before going to the grocery store; consequently, parents bought fruits and vegetables that participants disliked (e.g., broccoli and carrots). Some wished that their parents would buy them “juicy” fruit because this type of fruit was their favorite (e.g., melon, strawberries, apples, and grapes). Another complaint was that parents bought more vegetables than fruit, whereas they wished parents would buy more fruit than vegetables since children preferred fruit.

Peer pressure clearly does not work in favor of fruit and vegetable consumption. *My friends would think I'm weird* was a barrier to the boys; they gave a few personal examples of when their friends called them weird (e.g., when they ate an apple instead of “junk food,” or ate a tomato). Girls clearly believed that their friends might think it was odd if they ate more fruits and vegetables, too, but rationalized it by saying that this barrier could be avoided if they did not tell their friends what they were eating. (Of course, this isn't very practical given the number of hours in a day that children spend with their friends.)

*I'm not sure how to prepare them* was a barrier for some of the boys. This primarily seemed to be in reference to cooking vegetables. For example, they did not know how to cook or were not allowed to use the stove, or were unsure if they needed to use vegetable oil when preparing vegetables. Some also included “cutting” as part of preparation.

*It's more work to prepare them.* A few identified this as a barrier. Fruits and vegetables seemed like more work because they had to be washed off first, whereas they could just grab a cupcake or candy bar and peel off the wrapper. Others perceived that preparation was easy since they only had to grab it and peel it or bite into it.

When probed, a few participants noted that parents/relatives sometimes cut up fruits and vegetables for them and left them in the refrigerator. Children liked cut-up pieces because this made it easier to eat fruits and vegetables. Some preferred having their parents cut up fruits and vegetables for them because the children said they personally were too lazy to do this.

*They don't go well with the other food in a meal.* A couple girls and boys chose this as a primary barrier. Examples of combinations they disliked were raisins in rice, hamburger and carrots, fruit and burritos, and onions and tomatoes.

*They are not sweet enough.* A couple boys and girls identified this as a key barrier. To make them sweeter, they put sugar on fruits or ate candied or caramel apples. Putting peanut butter on apples was another way to improve their taste.

*I don't care about eating them* was a reason for a few boys. Even though they knew that they should eat more fruits and vegetables, they simply did not want to. This suggests that on a rational level children tend to understand reasons they should eat more fruits and vegetables, but some have not internalized this message and thus it does not motivate them.

## ***Expectations***

### Differences Expected

Participants identified many positive changes when asked what would happen if a kid their age started eating at least five servings of fruits and vegetables a day. The changes were both external (i.e., visible or tangible) and internal or intangible. Positive changes they identified were:

- Be and look healthier
- Be fit
- Fewer visits to the doctor
- Fight off cancer
- Be stronger
- Bones would grow and become stronger; bones would have more calcium
- Blood, hair and teeth would be healthier; no more cavities
- Eyesight would be better and eyes would look bright
- Have more energy to be able to do more
- Play all sports and play better in sports (e.g., run faster and run longer distances, kick the ball higher and faster, hit the ball harder, and have more energy at recess)
- Become smarter and more intelligent
- Participate more and do better in school (e.g., answer every question, do better on tests, get better grades, and have more energy while doing homework)
- Have no more stress
- Be more mature
- Lose weight
- Live longer

They also easily identified a number of benefits that they expected they would have as adults if they ate more fruits and vegetables now when they are children. These benefits were very similar to the benefits that children would realize from eating more fruits and vegetables:

- Be healthier
- Fight disease
- Be stronger
- Be more athletic; run like you're still a kid
- Be more active instead of just sitting around watching TV
- Stronger bones
- Better eyesight
- Be more intelligent; use their brain
- Live longer
- Might enjoy a variety of foods and tastes
- Would not be overweight

- Would not wish they could be children all over again to eat more fruits and vegetables this time around

Participants identified relatively few “bad” outcomes or results from eating more fruits and vegetables. Examples of undesirable results were:

- Gain weight
- Become tired of eating them
- Get addicted to them
- Be distracted because of thinking about which fruits and vegetables to eat
- Gas, diarrhea, stomach aches, feel sick, and throw up (from over-eating)
- Blood pressure and “sugar” problems

### How Others Would React

If they started eating more fruits and vegetables, participants felt that their parents would have mostly positive reactions while siblings and friends would have mixed reactions. Examples of their positive, encouraging reactions were:

- Parents would be happy
- Parents would say they were a good, healthy child and that they looked better.
- They would be supportive because parents would rather buy fruits and vegetables than unhealthy foods.
- Their doctor would say they were doing well and were healthier than before.
- Some of their friends would be surprised, in a positive way, and would tell them they were doing a good job.
- Their friends might start eating more fruits and vegetables, too, if they encouraged them.

They also offered fewer examples of negative reactions among parents and friends if they started eating more fruits and vegetables:

- Parents would suggest that they eat chips because fruit was expensive.
- Siblings and friends would tease them.
- Friends would tell them to stop because they were eating too many fruits and vegetables.
- Friends would call them a “nerd.”
- Friends would say that they were not like them anymore since their friends only ate “junk food.”

## **Motivators/Facilitators**

### Brainstorming

*Note: Girls and boys in Long Beach worked in teams to come up with suggestions for how to make eating fruits and vegetables fun, easy, important, and cool and hip. This exercise was dropped in the remaining cities due to time constraints.*

They offered a variety of suggestions for how to make eating fruits and vegetables fun:

- Make them more attractive or visually interesting (e.g., by topping one type of vegetable with another type, or topping them with garnishes)
- Squeeze lemon juice into a drink
- Play a game with vegetables (e.g., play hot-potato, play football with a cabbage, play catch by tossing grapes into your mouth)
- Not being forced by parents to eat them
- Get paid to eat them

It seemed that eating fruits and vegetables was not particularly difficult for these participants. Their only suggestions for making fruits and vegetables easy-to-eat were:

- Cut them into tiny pieces
- Just bite it and eat it
- Use a bowl or paper towel, and just bite into it

To make fruits and vegetables seem important, participants' suggestions focused primarily on health-related benefits:

- Fruits and vegetables make you healthier and stronger
- Help you stay healthy and happy
- Tell kids they were making a healthy choice by eating them

They suggested several directions for how to make eating fruits and vegetables cool. Generating positive word-of-mouth among peers was a popular suggestion.

- Have the popular kids eat them. Tell kids they can be in the popular group if they eat them too. Make it a fad.
- Start a chain reaction: tell a friend about eating fruits and vegetables, then that friend would tell another friend, and so on.
- Have a good rapper rap about eating fruits and vegetables
- Tell kids that they'll become a superhero by eating them
- Cut them into different shapes
- Dress fruits and vegetables up in clothes, then take the clothes off and eat them

Girls and boys in Sacramento were asked to come up with a list of ways to get them to eat more fruits and vegetables. Their list included several examples related to generating word-of-mouth recommendations among peers, as well as suggestions for generating a more positive image for fruits and vegetables.

- Get the coolest kids to eat more, then other kids would copy them
- Use older kids to tell younger kids that they'll be healthy if they eat more fruits and vegetables
- Tell kids that eating more fruits and vegetables will make them stronger, and they would be able to race faster than older kids (This was suggested by girls as a message to tell boys, and also was suggested by boys themselves.)
- Air more commercials and show cartoons like Sponge Bob
- Show famous people like Arnold Schwarzenegger eating them
- Offer programs at school (with a presenter who introduced kids to a fruit or vegetable, and gave them fruits and vegetables to sample and to take home)

When asked who was the best influencer to get them to eat more fruits and vegetables, Sacramento boys typically cited a parent or friends. Their rationale for why parents and friends were the best influencers was simply that they trusted them. Given the importance they place on their friends, it is likely that if their friends started eating more fruits and vegetables, they, too, would be big influencers.

*"I trust my mom. She fixes the kind of fruit I like almost every night...juicy, watery fruit like cantaloupe and watermelon."*

*"Dad says it will make me run faster and be stronger. Dad puts them in every meal."*

Sacramento boys were asked to identify a spokesperson that they would listen to in a commercial about eating more fruits and vegetables. Their suggestions were to use their favorite celebrity, popular bands (like The Edge and Bono of U2 according to one boy), and children who were recognizable from being in other commercials (the little girl in the Pepsi commercials, for example).

Celebrities who would be believable fruit and vegetable endorsers included those who were particularly athletic and talented. They included Jackie Chan and Chris Tucker because they are so active and strong. Basketball players like Michael Jordan, Chris Webber, and Shaquille O'Neal also seemed like they ate lots of fruits and vegetables because they jumped high, were so tall, and/or always made their shots.

## Kid Control

Participants generated a variety of ideas for what children themselves could do if they wanted to eat more fruits and vegetables and did not want to wait for adults to offer them. Several of their suggestions focused on making fruits and vegetables more convenient to eat (i.e., by preparing them in advance) and on making fruits and vegetables tastier to eat. Their suggestions were as follows:

- Put them in a Ziploc bag and eat them whenever they wanted
- Take a bag of fruits along when they went somewhere
- Prepare a sandwich with vegetables, put it in a bag, and eat it when they were hungry
- Have fruits and vegetables in the refrigerator, and eat them instead of meat
- Use a knife or electric chopper to chop them up
- Put peanut butter on apples or bananas
- Put salt on cucumbers
- Put cinnamon on sour apples
- Ask friends to eat them too
- Go buy fruits and vegetables

## Promise Statements

*Note: Participants were given a list of 10 promise statements. They used a star sticker to identify the two promise statements that made them most interested in eating more fruits and vegetables, and used an “X” to indicate the promise statements that they did not believe. Then they discussed the most motivating and least believable statements. A copy of the form they used for this exercise is in the Appendix.*

### **Motivating Promise Statements**

There were some differences for girls versus boys regarding motivating promise statements. (As with all qualitative research, the results are not statistically projectable.) Girls were motivated by the idea of *Have more energy (A)*, which they perceived to be quite similar to *Become stronger (B)*. Boys (and to a lesser extent girls) responded well to physical benefits such as *Do better at sports (I)*, *Become stronger (B)*, and *Grow (C)*. The remaining six statements were chosen by relatively few girls or boys as the most motivating.

Participants that felt *have more energy* was motivating, did so for the following reasons:

- More energy meant they could do a variety of physical activities, and do them better: playing sports, running, walking, jumping, exercising, and playing games.

*“You’ll have more power to run around the bases.”*

*“Everyone will be impressed if you can run faster.”*

- More energy also had positive implications for their bodies: bones would be stronger, and they would have better abdominal muscles.

Boys who felt *Do better at sports* was motivating wanted to keep their body in good physical shape so they could excel in sports. Some of the more athletic girls also liked this idea. Examples of how they wanted to do better were:

- Run faster and have more energy
- Have more power to push the skateboard

*Become stronger* had many implications that seemed compelling to both girls and boys. Some implications were related to their performance in sports; other implications were related to the physical condition of their body. Examples include:

- Be able to run longer
- Swim fast
- Do sit-ups
- Bones won't break if you fall
- Get bigger muscles so you can lift heavier things
- Get 6-pack abs
- See muscles in your arms
- Have muscles like Shaq

*Grow* had positive implications for boys and some girls, although boys also associated *grow* with growing pains. Examples of why *grow* was motivating include:

- They personally did not like being short.
- If their legs grew, they could run faster and kick the ball better in soccer.
- Boys with aspirations to be a basketball player wanted to be as tall as Shaq.

### **Unbelievable Statements**

Both boys and girls had trouble believing that eating more fruits and vegetables would help them *Look your best (D)*, *Make your family proud (G)*, or *Do better in school (F)*. Girls also doubted that eating fruits and vegetables would result in *Having more power (J)*; while boys had a hard time believing *Feel good about yourself (H)* and *Have a healthy weight (E)*.

*Look your best* was hard to believe because participants did not generally associate eating fruits and vegetables with their overall physical appearance, and they included clothes, hair styles, etc, in the idea of “looking ones best.” They explained why *look your best* was hard to believe as follows:

*“Eating fruits and vegetables won't make you change your clothes.”*

*“Wearing your best clothes and working out will make you look your best.”*

*“It won’t change your weight unless you diet. It doesn’t help you change how you look.”*

*“It doesn’t give you a total make-over. Only you can help yourself look your best, not vegetables.”*

*“Fruits and vegetables don’t really go into your skin and make you look better.”*

*“They don’t change how you look. They just put vitamins in you to keep your muscles, brain and heart going.”*

Those girls that believed *look your best*, reasoned that if they ate more fruits and vegetables, they would eat less unhealthy food and would not have pimples. Another positive connection for some girls was that some vegetables might be good for the skin, resulting in fewer facial wrinkles.

*“You’d look in the mirror and would like what you see.”*

One or two boys felt that *look your best* was believable because they would feel good, they would not feel sick, and they would be happier as a result:

Participants had trouble imagining that eating fruits and vegetables would *make your family proud*; it did not seem like a big enough achievement.

*“You make your family proud in other ways.”*

*“Just because you eat fruits and vegetables doesn’t mean your family will be proud of you.”*

*Make your family proud* seemed irrelevant to a few others. They perceived that their family did not really care if they ate their fruits and vegetables, or perceived that their family already was proud of them for other reasons such as getting good grades in school.

Being very literal, some participants were not aware of how fruits and vegetables could help them *do better in school* and they had not seen this kind of result so far.

*“Fruits and vegetables won’t put answers in your head.”*

*“They just affect your bones, not your brain.”*

*“Vegetables don’t have anything to do with school.”*

*“I eat vegetables and they haven’t affected my grades. I still get F’s, C’s and D’s.”*

Other girls and boys were aware of the connection between their performance at school and eating fruits and vegetables, yet this was still not the most compelling reason to eat fruits and vegetables. They explained that fruits and vegetables gave their brain vitamins and minerals to help their brain get smarter and think better, and to help them stay focused. Doing better in school was important so they could get the grades they needed to remain active in sports and eventually, get a scholarship to college.

*Have more power* did not seem to be well understood by participants. They were unsure what kind of “power” they would get. Some did not choose *have more power* because it seemed similar to being stronger and having energy.

*Feel good about yourself* was hard for some participants to believe, especially boys, because they did not know of any connection between eating fruits and vegetables and their emotions. Eating fruits and vegetables would not make a difference in their emotions. One or two others suggested that eating fruits and vegetables might make them feel better about themselves because they knew they were eating a healthy diet.

*Have a healthy weight* was not discussed in much detail in the groups. A few participants chose it as either one of the most motivating statements or as one of the least believable statements. Some participants felt that they might get fat if they eat more fruits and vegetables.

## **Physical Activity**

### Statement Options

*Note: Several exercise-related terms were presented to participants, one at a time. They were asked to give examples to illustrate the meaning of each term.*

Participants tended to associate the term “exercise” with formal, structured, P.E. types of activities. Typical examples of “exercise” that emerged in all groups were jumping jacks, push-ups, sit-ups, crunches, and running. Additional examples of “exercise” were going to a gym, doing weights, and running on a treadmill. It was noteworthy that participants did not hesitate at all when offering examples of “exercise,” and seemed very sure of their responses.

When asked for examples of “be active,” there was some hesitation among participants and their examples were more diverse. Many of their examples for “be active” focused on unstructured, spontaneous kinds of activities like running, jumping and just moving around. To some children, “be active” had negative “get hyper” connotations. In most cases, it did suggest activity that would get their heart rate up. Examples of their diverse impressions of “be active” were:

- Running, jumping, jumping off a tree
- Going outside and playing with friends; going outside and doing something
- Having more fun and getting more energy
- Be ready to play; be prepared to play
- Don’t take a break; focus on what you’re doing and keep going
- Be awake
- Be an active listener
- Do arts and crafts
- Negative connotations: being hyper, having too much energy, wiggling, jumping off the bed, running around the house, annoying everyone

Participants had diverse understandings of “get active.” Several associated “get active” with something their coach would tell them while playing an organized sport. Examples of their diverse impressions of “get active” are:

- Go outside and play
- Play soccer
- Try a new activity
- Get active in the game, or get the ball active
- Focus on the game and don’t daydream (when playing a sport); be alert and pay attention
- Get ready to be active

“Be physically active” generated some confusion and also evoked inconsistent examples of what this meant. Some equated this with the kinds of exercise done in P.E. class, probably because the word “physically” sounded like “physical;” others were unfamiliar with the word “physically.”

*“I don’t know what ‘physically’ means.”*

*“‘Physically’ is a good word but you should use more kid-words to persuade us.”*

*“‘Physically’ is something I saw in my health book.”*

Their examples of “be physically active” were:

- Running and jumping, doing jumping jacks, doing sit-ups
- Playing sports, playing touch football, playing kickball
- Running around
- Sitting down and coloring
- Sitting down and being quiet
- Studying and thinking more

Participants associated “play” with doing something fun, often pointing out that “play” could refer to both indoor and outdoor, active and sedate, activities. “Play” was something they could do by themselves or with friends, in structured or unstructured activities. To participants, “play” clearly seemed more fun than “exercise.”

*“Exercise is something you have to do; playing is something that kids like to do. Kids like that word (play).”*

Examples of “play” were:

- Play sports: soccer, basketball, baseball
- Play games: tag or bar tag outdoors; board games or video games indoors
- Do various outdoor activities: have an adventure, ride your bike, ride your skateboard

“Get up and play” (presented only to the group of Sacramento boys) had different interpretations. These participants felt that “get up and play” sounded like more fun than any of the other alternatives they evaluated. Their examples were:

- Get ready to run and jump
- Get active and be active
- Run around
- Play video games

Participants tended to associate the terms “be active” and “be physically active” with the kind of exercise or activity that made their heart beat faster and made them sweat. A few others, especially in the boys’ groups, felt that “exercise” alone was the most appropriate term for that kind of exercise or activity because exercise involved a lot of work. One girl suggested the term “play active” to describe this kind of exercise or activity, perhaps to make it sound like fun and less like work.

## Perceptions of Amount of Daily Exercise Needed

There was no consensus among participants when they were asked how much exercise children their age should get in a typical day. Their estimates of the recommended daily amount of exercise ranged from 30 minutes to one or two hours, to the whole day. They seemed to be guessing when offering their estimates. Participants did not appear to have a sense of confidence in their answers about physical activity, in contrast to the confidence that some displayed when stating that children their age should eat five servings of fruits and vegetables a day.

When asked which of two phrases sounded easier, being active or exercising for “60 minutes a day” or “one hour a day,” many of these participants immediately commented that these phrases meant the same amount of time.

While knowing that these were equal amounts of time, participants tended to think that “60 minutes” sounded easier/shorter than “one hour.” Their usual rationale for preference of “60 minutes” was that “minutes” were shorter than an “hour.” Other participants favored “one hour” as the easier-sounding alternative, based on the rationale that “60” was a double-digit number and therefore, seemed harder and longer than “1,” a single digit number.

## Reasons for Lack of Exercise

“Being lazy” and preferring to “just sit around” were the typical reasons offered by participants to explain why children their age did not get enough exercise in a day. Instead of exercising and being active, children preferred playing video games, playing with the computer, watching TV, or just being left alone.

Participants generated a few other reasons to explain the lack of exercise among children their age:

- Kids did not think that exercising would be helpful.
- They lacked the confidence that they could exercise.
- They did not have enough energy and became tired quickly, due to poor eating habits (e.g., not eating breakfast or not eating enough fruits and vegetables).

In addition to these reasons, Sacramento girls identified a few environmental/societal factors to explain children's lack of exercise:

- Some kids attended daycare or after school programs and were not allowed to go outside.
- Girls were afraid of being kidnapped (if a kidnapping was in the news recently).
- They were afraid of being shot at when they played outside (if there was a recent shooting incident in their neighborhood).

## **Final Suggestions**

*Note: When time permitted at the end of the focus groups, participants wrote their suggestions for how to encourage children their age to eat more fruits and vegetables and to get more physical activity or exercise. The suggestions offered by girls in Fresno and girls and boys in Sacramento are shown below.*

Girls' suggestions for what to say or do to encourage children to eat more fruits and vegetables were:

- You can grow up to be a famous soccer player, singer, doctor, or actress.
- It will make you stronger and make you live longer.
- You'll be healthier.
- It's the best thing for us.
- Helps you get better grades in school.
- They should talk more about fruits and vegetables in school.
- Put up fruit wallpaper.

Girls' suggestions for what to tell children to encourage them to get more exercise were:

- They can get awards to do really well and they can do anything they want.
- It will make them stronger.
- If they exercise, they will live longer.
- They'll get an A+ or 100%.
- Don't be a dummy and sit around.
- Make up a game so they can run a lot.

Boys' suggestions for encouraging children to get more exercise tended to be sports-oriented and included:

- Play your favorite sport.
- Play basketball and baseball.
- Make a rule that you have to exercise at least once a day, for one hour.